

ASIA PACIFIC ECONOMIC COOPERATION (APEC)

**2013 APEC WORKSHOP ON
GEOTHERMAL ENERGY DEVELOPMENT**

**NTUH International Convention Center, Taipei
Chinese Taipei**

25th - 26th June, 2013

INTRODUCTION:

Geothermal energy is green, renewable, and sustainable. Due to its stable output, geothermal power can serve as an ideal base-load, as opposing to wind and solar energies which are intermittent. Many of the APEC Economies are located at the Pacific Ring of Fire that possesses abundant geothermal potential. To assist exploiting this renewable resource, we are organizing this workshop with the attempt to serve as a pivotal step in gathering international capacities and in providing a surging momentum in geothermal development in APEC region.

PROGRAM REVIEW:

Date	6/25 (Tue.)	6/26(Wed.)
AM	Geothermal Status and Perspectives (Session I)	Enhanced Geothermal System Technologies (Session III)
PM	Geothermal Exploration and Assessment (Session II)	

AGENDA: DAY-1 25TH (Tuesday)

Time	Agenda	Chair
09:00 - 09:05	Opening Remarks	
09:05 - 09:15	Welcome Remarks	
09:15 - 09:25	Welcome Remarks	
09:25 - 09:55	Keynote Speech: Worldwide Geothermal Utilization (John Lund, Previous President of International Geothermal Association, USA)	
09:55 - 10:10	Break	
10:10 - 10:35	Presentation I-1 Recent Advances in US Geothermal R&D, with Implications for Global Development (Douglas Hollett, Department of Energy, USA)	BOE, TPE JinSheng Su
10:35 - 11:00	Presentation I-2 A Short History of 60 Years of Geothermal Development in New Zealand (Brian Carey, Institute of Geological and Nuclear Sciences Limited, NZ)	
11:00 - 11:25	Presentation I-3 Perspective on Geothermal Energy in Japan: Beyond Great East Japan Earthquake (Noriyoshi Tsuchiya, Tohoku University, JPN)	
11:25 - 11:50	Presentation I-4 Taiwan Geothermal Status and Perspectives (Shoung Ouyang 歐陽湘, ITRI GEL, TPE)	
11:50 - 12:10	Q&A	
12:10 - 13:10	Lunch	
13:10 - 13:35	Presentation II-1 DOE's Innovative Exploration Technologies Program associated with Conventional Geothermal Systems (Patrick F. Dobson, Lawrence Berkeley National Laboratory, USA)	NSC, TPE Hongey Chen
13:35 - 14:00	Presentation II-2 Environmental Anxiety Meets Geothermal Energy (Susan Petty, AltaRock Energy, Inc, USA)	
14:00 - 14:25	Presentation II-3	



	Geothermal Power Plant Development (Kevin Wallace, Power Engineers, Inc, USA)	
14:25 - 14:40	Break	
14:40 – 15:05	Presentation II-4 Application of Geoscience for Geothermal Resource Evaluation and Mitigation of Development Risks (Greg Bignall, Institute of Geological and Nuclear Sciences Limited, NZ)	
15:05 – 15:30	Presentation II-5 Precise Repeat Gravity Measurement for Estimation of Mass Balance in a Geothermal Reservoir (Yasuhiro Fujimitsu, Kyushu University, JPN)	
15:30 – 15:55	Presentation II-6 Exploration for Geothermal Energy - Some Insights (Brian Carey, Institute of Geological and Nuclear Sciences Limited, NZ)	
15:55 – 16:20	Presentation II-7: Role of Geology in Targeting Permeability for Geothermal Resource Utilization (Greg Bignall, Institute of Geological and Nuclear Sciences Limited, NZ)	
16:20 – 16:40	Q&A	

DAY-2 26TH (Wednesday)

Time	Agenda	Chairman
09:00 - 09:10	Welcome Remarks	
09:10 - 09:35	Presentation III-1 Well Construction Technology Efficiencies - Research Efforts of the United States Department of Energy, Geothermal Technologies (Stephen J. Bauer, Sandia Lab, USA)	ITRI-GEL, TPE Shoung, Ouyang
09:35 - 10:00	Presentation III-2 Enhanced Geothermal Systems - DOE Field Demonstration Projects, R&D Innovations, and Roadmapping Efforts (Patrick F. Dobson, Lawrence Berkeley National Laboratory, USA)	
10:00 - 10:25	Presentation III-3 Innovative Stimulation Technology for Future Energy - More with Less (Hai Liu 劉海, Schlumberger Inc., USA/China)	
10:25 - 10:35	Break	
10:35 - 11:00	Presentation III-4 Description and Application of the US DOE Induced Seismicity Protocol/Best Practices: Experiences and Lessons Learned at The Geysers Geothermal Field, California (Ernest L. Majer, Lawrence Berkeley National Laboratory, USA)	
11:00 - 11:25	Presentation III-5 Risk in EGS Project Development (Susan Petty, AltaRock Energy, Inc, USA)	
11:25 - 11:45	Q&A	
11:45 - 12:00	Closing Remark	